

Office Memorandum • UNITED STATES GOVERNMENT

TO : Chief, D/S, O/RR

DATE: 14 March 1951

FROM : Chief, S/Tr, O/RR

SUBJECT: Transportation Vulnerability of the Far East

Ref : Letter from [REDACTED] to the Assistant Director,
O/RR, dated 7 February 1951. 25X1A5a1**I. General Implications of Communist Transportation Limitations in the Far East**

The major theme of the reference letter is that the Soviet Union would have great difficulty in supporting military operations anywhere in East and Southeast Asia because the industrial regions of the USSR are separated from areas of potential hostilities in the Far East by transportation routes of limited capacities, which are vulnerable to military action. The letter's emphasis on the unusual length and vulnerability of these routes is well-founded. (As a matter of fact, in the improbable event that both the USSR and the US were to give absolute top priority to the movement of supplies into these areas, the US could move more equipment into any controlled area of the Far East than the USSR could move across Siberia to any area in the Far East, with the possible exception of Vladivostok. It is unlikely, however, that any of these areas will witness hostilities to which either power would be willing to allocate the major portion of its industrial and military resources.)

II. Aggregate Soviet Logistic Capabilities in East and Southeast Asia

The only large traffic artery across Siberia to the Far East is the Trans-Siberian railroad, which would be essential in virtually any protracted Soviet-supplied military operation of consequence in East or Southeast Asia. According to present military estimates, this line could handle 22,500 tons per day of through wartime traffic from the Western USSR to Vladivostok. The precise basis for this estimate is not known. Transportation Branch believes, however, that barring major combat damage, this capacity could be increased as much as 25 percent by the provision of additional rolling stock and locomotives. This increase might be achieved gradually from Soviet railway equipment production without disrupting traffic in other areas or immediately by withdrawals from other lines, with a consequent effect on their operations. (Rail capacity into Vladivostok could be augmented by several thousand tons daily by use of the Manchurian railroad system, provided these shipments originated in Manchuria. On the assumption of an effective naval blockade, no appreciable supplies could be waterborne to the Vladivostok area.)

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To other areas of potential hostilities to the South and Southwest of Vladivostok, Communist transport capabilities progressively decrease and any diversion of traffic through Manchuria from the Trans-Siberian route to these areas would proportionately decrease the capacity for movements to Vladivostok.

Estimated Through Rail Traffic Capacities from the
Western USSR to the Far East

<u>AREA</u>	<u>TONS PER DAY*</u> (Based on Transportation Corps information)
Vladivostok	22,500
North Korean border	12,500
Tientsin-Peiping	12,000
Shanghai-Nanking	3,000
Canton	3,000
Liuchow	2,000

*NOTE: These capacities would not permit delivery of the indicated quantities to more than one destination at any given time. Furthermore, they are not intended to be precise computations, but are included merely to indicate the approximate magnitude of the various capacities in question.

The capacity of the Trans-Siberian railroad far exceeds that of the rail connections to the Manchurian-North Korean border and the Trans-Siberian is therefore not a controlling factor in the ability of the USSR to move supplies to this area. There is no direct rail connection from the Vladivostok area into North Korea. By using a circuitous route from Vladivostok via Mutanchiang, however, as well as the rail lines from the Trans-Siberian through Manchuria to the North Korean border, a total rail capacity of an estimated 12,500 tons would be available. This could be augmented by movements in minor quantities through the blockade in small coastal vessels from the Vladivostok area. From the same source areas, approximately the same quantity of supplies could be alternatively transported over the rail line through Mukden south into the Tientsin-Peiping area.

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For movements further south, the restricted capacity of the Chinese rail line from Tientsin to the Shanghai-Nanking area would limit rail traffic to 3,000 tons per day. An additional 3,000 tons could be placed in this area by the use of Yangtze river craft from the Hankow rail terminus on the Peiping-Hankow railroad. Furthermore, unless the assumed blockade of the China coast were completely effective, this tonnage could be supplemented somewhat by small vessels in long-haul movements (upwards of 1,000 miles) along the coast from Tientsin south or from Canton and Hong Kong north. Up to 3,000 tons of supplies could be placed into the Canton area from the north over the Hankow-Canton railroad, possibly supplemented by some traffic moved by coastal shipping which might elude a blockade.

The nearest usable railhead for the support of hostilities in northern Indo-China which has through rail connections is located at Liuchow, approximately 200 miles from the Indo-Chinese border. The Hankow-Liuchow rail line has a maximum capacity of about 2,000 tons per day, which probably exceeds existent overland transport capabilities from the railhead to forward combat areas across the border. (Although there is another rail line leading south toward the Indo-Chinese border from Kunming, this line does not extend an appreciable distance above Kunming and does not connect with the remainder of the Chinese rail network.) It is likely that small additional quantities of supplies could be moved along the coast by sea for military operations in northern Indo-China.

For operations further west in the Burma area, it is estimated that about 500 tons per day could be trucked from Kunming over the Burma Road, the only important supply route in this area. It is unlikely, however, that such a volume of goods could be moved overland from Soviet or Manchurian sources as far as Kunming. In the Assam area, moreover, the mountain passes are several hundred miles removed from the nearest Chinese road system and through traffic from the Soviet Union across Tibet would be limited to a maximum of 100 tons daily. Still further west, for possible operations into Nepal and India, the communications from the USSR through Sinkiang and Tibet are virtually useless for any appreciable volume of traffic on a sustained basis. Although supply movements could theoretically be made across caravan routes in this area, in most of which motor transport is not possible, the difficulties would be so great that the volume of goods which could be moved would probably not reach 100 tons per day.

Logistical operations by rail from the USSR to some areas of East Asia could be supplemented somewhat by truck movements. There are, for example, five highways crossing the Soviet-Manchurian border which have an estimated aggregate capacity of 1600 tons per day. Two other highways

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from the USSR, through Ulan Bator and Manchouli respectively, could deliver an additional 200 tons, with the possibility that this capacity could be materially increased by difficult and time-consuming improvements involving the allocation of major military personnel and materiel resources. The only other border crossing usable by motor vehicles is the route from Alma Ata to Lanchow in central China over which, according to a British estimate, as much as 400 tons a day could be trucked. This quantity of goods, however, would not normally affect the logistic situation in any areas of potential hostilities, since these areas have no practical overland transport connections with Lanchow.

With a sufficiently high priority, a concentrated airlift operation could be organized from remote regions of the USSR to virtually any area of potential hostilities in the Far East. On a shorter haul and with pre-arranged fuel supplies, it is estimated that a fleet of 300 Soviet twin-engine transport aircraft could deliver about 3,150 tons per month, for example, from Peiping to the Kunming area. A sustained long-range airlift operation, however, would be virtually prohibitive for the USSR, in view of the number of aircraft which would have to be allocated for the operation, as well as the serious problems connected with fuel supply.

Only through movements of supplies from major sources in the Soviet Union have been discussed above and the problem has therefore been considered only in its broadest terms. Regional and local supply operations could be conducted by various improvised means, ranging from shorter-haul airlifts down to extensive use of human and animal carriers. The foregoing discussion, furthermore, does not reflect the possibilities of stockpiling military equipment in the Far East prior to hostilities, nor probable damage to facilities and installations during hostilities.

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On the other hand, so far as is known, no agency in Washington is seriously attempting to follow individual Chinese Communist ship movements. Adequate coverage of Chinese Communist traffic by this office would require personnel increases and considerably expanded collection arrangements. In fact, comprehensive coverage of Chinese shipping would probably not be possible, since the majority of the traffic along the China coast is carried by large numbers of vessels of under 1,000 tons which are not subject to adequate surveillance. During the hostilities in Korea, for example, it has not been possible to follow ship movements satisfactorily, even though the US has naval forces operating in the area on a combat basis. On the other hand, it would probably be possible to detect large concentrations of shipping along the China coast.

As the reference letter points out, much of the shipping in the China trade flies the flags of Western nations. There is abundant evidence, however, that a substantial portion of such tonnage is actually Chinese Communist-owned or controlled. Consequently, these ships could be promptly re-registered if their present nominal nationalities proved embarrassing to the Communist owners.

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B. Trans-Siberian Railroad

Present estimates of the capacity of the Trans-Siberian railroad have already been indicated. This office is continuing its research on the strategic significance of this line and will devote available manpower resources to the

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study of every aspect of Trans-Siberian rail facilities and operations, as the future expanded personnel of the Branch permits.

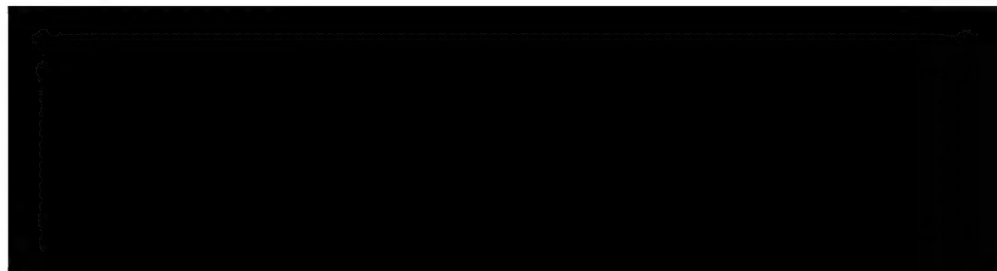
It is believed that the principal limiting factor on the Siberian line concerns the quantity of rolling stock which the USSR has allocated to Trans-Siberian traffic, rather than the capacity of the facilities themselves. Consequently, there may be a considerable flexibility upward in the capacity of this line. It is currently estimated, for example, that traffic over the Trans-Siberian could be increased perhaps as much as 25 percent if the requisite rolling stock were provided. Since there is a substantial capacity in the USSR for the production of rolling stock and locomotives, the capacity of the Trans-Siberian railroad could be built up without disrupting traffic elsewhere in the Soviet Union. Within limits, the USSR could increase capacity on this line immediately by withdrawing rolling stock and locomotives from the remainder of the Soviet network, in which case a ten percent increase in Trans-Siberian capacity, for example, might be attained by the withdrawal of only about one percent of the total rolling stock and locomotive inventories elsewhere.

C. North-South Communications in China

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D. Road Communications of China with Indo-China, Thailand, Burma and India.

Although motor transport routes in South China leading to South Asia are of little economic importance, their military significance is disproportionate to the relatively small volume of goods which can be moved over them. This stems from the fact that they constitute the only means of transportation (except air) across China's southern border, there being no trans-border rail connections. The Chinese Communists, in fact, have expended considerable effort to improve and expand road transport in this area, presumably for military purposes.

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E. Caravan Routes from the West

Knowledge of the current status of these routes is virtually nil. Available information on these routes is limited to data no later than 1946.

F. Oil in the Far East

It is agreed that the normal and most economic means of supplying oil to the Communist Far East is by tanker. It is not correct, however, to consider long rail hauls of petroleum as wholly uneconomic. During World War II, for example, oil was moved regularly by train from the mid-continent area of the US to New York. It is estimated that the Soviet Union is currently moving substantial quantities of petroleum to the Far East across the Trans-Siberian railroad. In a wartime situation, moreover, the Soviet Union would presumably be subject to an effective naval blockade and normal economic considerations would not apply.

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It is also agreed that oil transportation would be a difficult problem for the Communists if war in the Far East should spread through Southeast Asia. This would result, however, from damage to the Chinese railroads rather than from the economics of rail transportation of petroleum. The Communist requirement for oil in Southeast Asia would probably not be great because mechanized and air operations would be sharply limited by factors other than the oil supply. Even with damage to the Chinese railroads, moderate quantities of oil would reach the area, since rail capacities could be supplemented by overland movements and possibly even by emergency airlifts of short duration. Furthermore, stockpiling of oil would almost certainly take place prior to hostilities.

IV. Development of Tactical Concepts

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The tactical concepts which [REDACTED] suggests be developed on the basis of our knowledge of the Communist transport situation in the Far East are the responsibility of the Joint Chiefs of Staff and the appropriate military services. Likewise, specific plans of action, including attacks on Communist transportation systems in the Far East, are no doubt under development by the armed forces. The Air Force, for example, has long studied Soviet transportation from this point of view and has organized a large fund of target information on installations and facilities along the Trans-Siberian railroad, as well as on the Chinese rail system. The Navy undoubtedly has also developed detailed plans for possible blockades of the China coast and the USSR, as well as for attacks against Chinese and Soviet ports, shipping and other transport targets. Although the contribution which CIA can make in the tactical field is obviously limited, there will undoubtedly be instances in which the research undertaken by Transportation Branch within its mission could be of value to other agencies in connection with tactical planning.

V. Measures Necessary for the Fulfillment of Transportation Branch Mission

25X1A5a1 [REDACTED] In order to achieve the depth and scope of research which Mr. [REDACTED] feels is necessary, in which this Branch heartily concurs, aggressive action in various directions will be necessary. A number of requirement directives of major importance and broad scope have already been issued by this Branch. The Navy Department, for example, has been asked to act upon a comprehensive collection program for

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expanded intelligence reporting on several aspects of Soviet maritime affairs. Almost four months have elapsed, however, since Transportation Branch submitted its requirements, and almost three months since OCD made these requirements known to the Navy. Since no reply has yet been received, the prospects for adequate fulfillment of these important intelligence requirements by the Navy do not appear favorable.

An investigation has been undertaken with OCD of the feasibility of establishing machine records in that Office, based upon Lloyd's register of shipping. Such statistical records would greatly facilitate our analysis of the patterns of Communist and non-Communist shipping to and from Orbit ports. Steps are also being taken to survey and determine the availability to OO/C of qualified sources on Soviet Orbit transport matters, with a view to maximum exploitation of such sources by detailed technical interrogation and possibly on an external research basis. Branch analysts are reviewing the extent of the data available on Orbit transportation and will initiate additional collection directives as the need becomes apparent.

Proper reporting, analysis and research on transportation matters would require not only expanded collection facilities in the field, but also a substantial increase in the personnel of this Branch. Although the Branch will aggressively continue to avail itself of present reporting facilities through requirement directives, it does not appear likely that the responses thereto will prove satisfactory, particularly in cases necessitating extensive field collection action.



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